Avigilon Control Center Player User Guide

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Introduction

What is the Avigilon Control Center Player

The Avigilon Control Center Player is the video player for Avigilon Native Video Export (AVE) files and Avigilon Backup (AVK) files.

The Player displays video in image panels, and allows you to control the playback through the Timeline. The Player is able to authenticate video files against tampering, and can be used to re-export video into other formats. Both AVE and AVK video include event data embedded in the file, so you are also able to search for specific alarms, POS transactions or license plate recognition events linked to the video.

A copy of the Player can be downloaded from the Avigilon website, or exported with the AVE file from the Avigilon Control Center Client software (see the *Avigilon Control Center Client User Guide* for more information).

To watch a video overview of the application, see *Module 3 - Avigilon Control Center Player* in the Avigilon University - End User Stream.

For More Information

Visit Avigilon at http://www.avigilon.com/ for additional product documentation.

Avigilon University

The Avigilon University provides free online training videos that demonstrate how to set up and use the Avigilon Surveillance System. Register online at the Avigilon Partner site to begin: http://avigilon.com/partners/

Support

For additional support information, visit http://www.avigilon.com/support/.

Regular Avigilon Customer Support Center hours of operation are from 6:00 a.m. to 6:00 p.m. Pacific Standard Time (PST) and can be reached by calling the toll-free number: +1.888.281.5182.

E-mails can be sent to: support@avigilon.com.

For emergency technical support 24 hours a day, 7 days a week, please call the Avigilon Emergency Technical Support Hotline at +1.604.506.3117.

Upgrades

Software and firmware upgrades will be made available for download as they become available. Check http://www.avigilon.com/support/software for available upgrades.

Feedback

We value your feedback. Visit our feedback page to comment on our products and services: http://avigilon.com/feedback/

Starting and Shutting Down the Avigilon Control Center Player

The Avigilon Control Center Player can be started or shut down at any time.

Starting the Player

The Player can be opened in any of the following ways:

- Double-click the **Avigilon Control Center Player** shortcut icon on the desktop.
- From the Windows Start menu, select **All Programs > Avigilon > Avigilon Control Center Player > Avigilon Control Center Player**.

When the application first opens, you will be prompted to open an AVE or AVK file.

- Double-click an Avigilon Native Video Export (AVE) file or Avigilon Backup (AVK) file. The Player opens and displays the video file.

Shutting down the Player

- In the Avigilon Control Center Player software, select **File > Exit**.

Views

What are Views?

A View is a tab composed of image panels that allows you to organize how video is displayed.

For example, you can choose to display video from multiple cameras at the same time by using different layouts.

Selecting a Layout for a View

You can organize how video is displayed by selecting a View layout. The figure shows the default View layouts.

- Select **View > Layouts > # Division**.
- On the toolbar, select the **Change Layout** button then select one of the layout options.

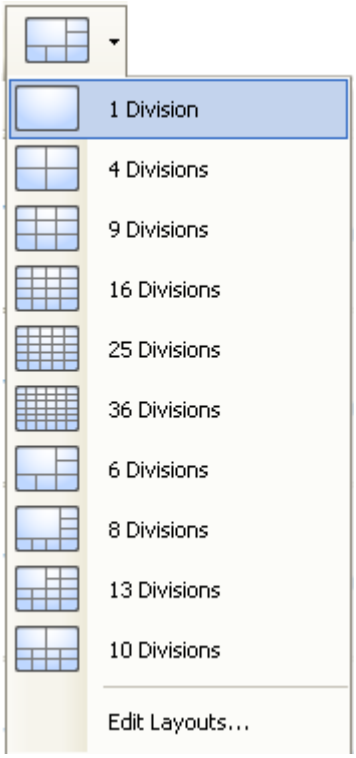


Figure A. Layouts on the toolbar

Editing a View Layout

If the default View layouts do not fit your surveillance requirements, you can customize a View layout.

1. On the toolbar, select the **Change Layout** button then select **Edit Layouts**.

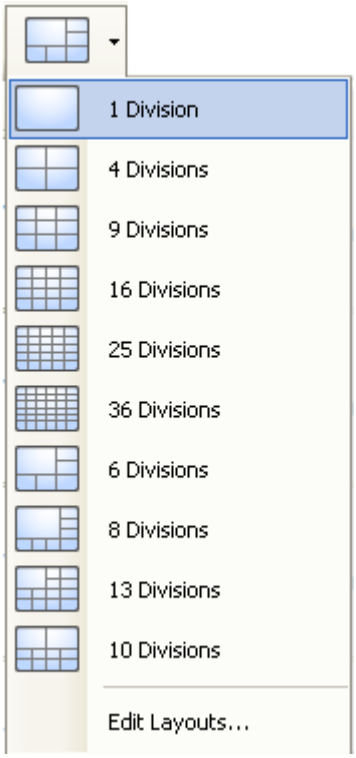


Figure A. Layouts on the Toolbar

2. In the Edit Layouts dialog box, select the layout you want to change.
3. Enter the number of **Columns** and **Rows** you want in your layout.
4. In the layout diagram, do any of the following to further customize the layout.

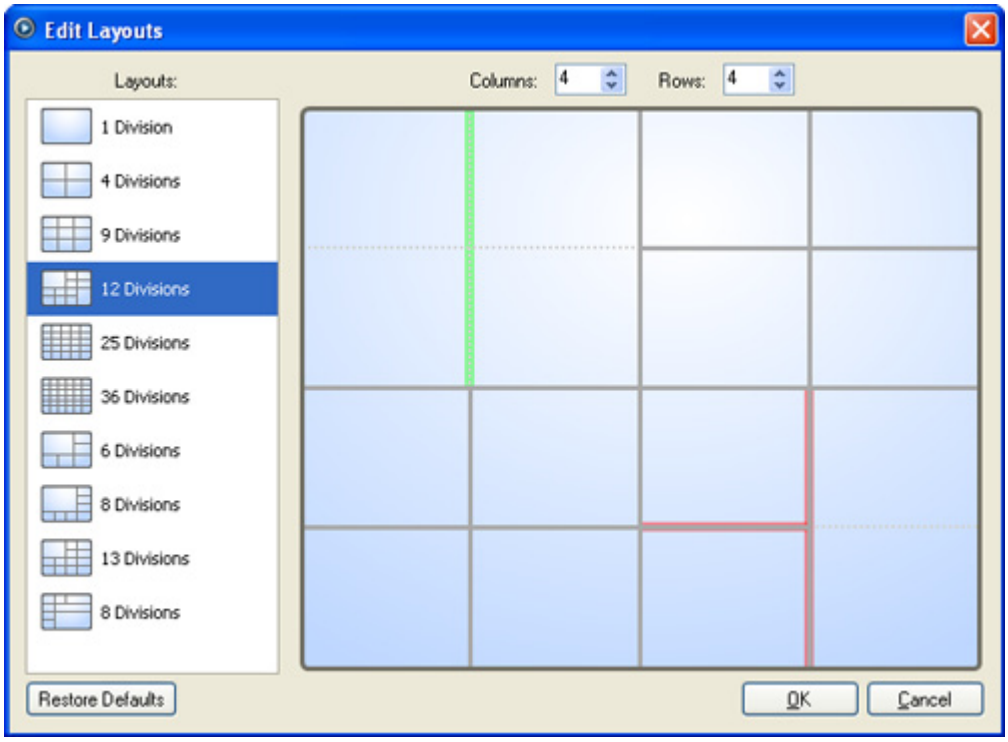


Figure B. Edit Layouts dialog box

- To create a larger image panel, select a grey line to delete the border between two image panels. When a line is highlighted in red, the line can be deleted.
- To restore an image panel, select a dotted line to divide a large image panel into two. When a dotted line is highlighted in green, the line can be restored.
- To restore all default View layouts, click **Restore Defaults**. All custom layouts in the Layouts list will be replaced.

Note: You can only add or subtract lines to create a rectangular shape.

5. Click **OK** to save your changes. The previous View layout has been replaced with your customized layout.

Tip: The keyboard commands used to access View layouts are linked to the layout's position on the View Layouts list. For example, if your custom layout is placed at the top of the Layouts list (layout 1), you can press Alt + 1 to use that layout.

Making a View Full Screen

You can maximize a View to make full use of a monitor.

- On the toolbar, click **Full Screen**.

Ending Full Screen

- On the toolbar at the top left of the screen, click **End Full Screen**.

Tip: The toolbar is hidden when the application is idle. Move your mouse to display the toolbar.

Video

The Avigilon Control Center Player allows you to watch exported Avigilon Native Video Export (AVE) video and Avigilon Backup (AVK) video in View tabs, similar to the Avigilon Control Center Client software.

If the video file contains video from multiple cameras, the video can be displayed in multiple image panels. You can zoom and pan the exported video images, and use the Timeline to control the playback of the recorded video.

Watching Recorded Video

While reviewing recorded video, you can also choose to watch the same camera video at different zoom depths and control the video playback.

Perform any of the following procedures to control the recorded video playback:

Adding and Removing Cameras in a View

When you first open an AVE or AVK file, all the video stored in the file are displayed in the View by default. So, if the file contains video from 4 cameras, you will automatically see video from all 4 cameras in the View. You can change the video displayed in the View by adding or removing cameras.

Adding a Camera to a View

Perform one of the following:

- Drag the camera from the System Explorer to an empty image panel in the View.
- Double-click a camera in the System Explorer.
- In the System Explorer, right-click the camera and select **Add to View**.

  The camera is added to the next empty image panel in the View layout.

Tip: You can drag the same camera to multiple image panels to watch the video at different zoom levels.

Removing a Camera From a View

Perform one of the following:

- Right-click the image panel and select **Close**.
- Inside the image panel, click **Close**.

Zooming and Panning a Video

The zoom and pan tools allow you to focus on specific areas in a video.

Using the Zoom Tools

The most common way to zoom in and out of the video image is to rotate the scroll wheel on your mouse. The software also includes a set of Zoom tools that can be used with your mouse:

1. Select a Zoom tool:
    - From the **Tools** menu, select **Zoom In Tool** or **Zoom Out Tool**.
    - On the toolbar, click **Zoom In Tool** or **Zoom Out Tool**.
2. Click the image panel until you reach the desired zoom depth.

Using the Pan Tools

You can right-click and drag inside an image panel to pan the video image. Or, you can use the Pan tool:

1. Select the Pan tool:
    - From the Tools menu, select **Pan Tool**.
    - On the toolbar, click **Pan Tool**.
2. Drag the video image in any direction inside the image panel.

Listening to Audio in a View

If there was an audio device linked to a camera, the Audio bar is displayed when you review the camera's video.

To listen to the audio detected by the audio input device, perform any of the following:

- In the lower-right corner of the image panel, click to mute or activate the audio.
- Move the slider to change the volume.

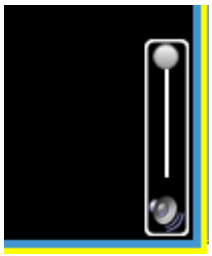


Figure A. Audio bar

Playing Back Recorded Video

The Timeline displays when video was recorded and lets you play back the recordings.

The colored bars on the Timeline show the camera's recording history:

- A red bar shows the camera recorded an event (for example, a digital input or motion event).
- A blue bar shows the camera recorded video, but not in response to any event.
- White areas show that the camera did not record any video.
- An orange bar is a bookmark in the camera's recording history.

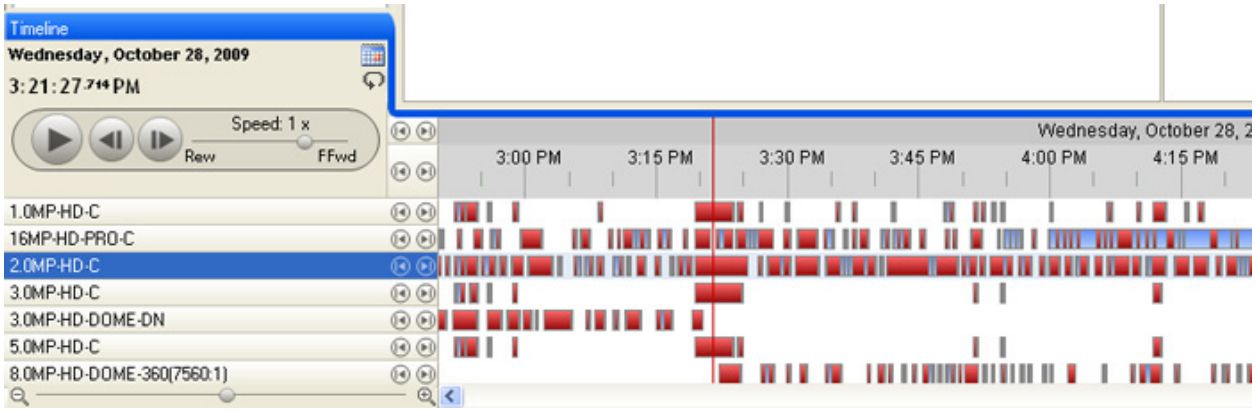
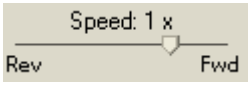
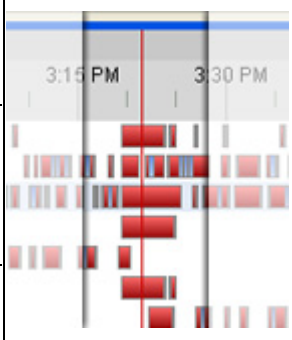


Figure A. Playback tools on the Timeline

Use any of the following controls to playback the recorded video files:

Action	Control	Procedure
To select a		• Click the calendar icon and select a date

playback time		and time. • Or, click on a point in the Timeline.
To loop playback		Click **Loop Playback** to repeat the video when the video is played.
To start playback		Click **Play**.
To stop playback		Click **Pause**.
To move forward a frame		Click **Step Forward**.
To move back a frame		Click **Step Backward**.
To control the playback direction and speed		Drag the slider to the right to move the video forward. Drag the slider to the left to move the video backward. The farther away the slider is from center the faster the playback speed.
To jump forward or back on the Timeline		On the Timeline, click one of the **Go Forward** or **Go Back** buttons to move to different points on the Timeline.
To expand the Timeline to a specific moment in time		• Move the slider on the bottom right to zoom in or out on the Timeline. • Or, you can place your mouse over the Timeline and use the scroll wheel to zoom in or out on the Timeline.
To center the Timeline on the time marker		Right-click the Timeline, and select **Center on Marker.**
To move through the Timeline quickly with the time marker		Drag the time marker through the Timeline.
To pan the Timeline		• Move the horizontal scroll bar under

		the Timeline. • Or, right-click and drag the Timeline.

Reviewing POS Transactions

While you monitor recorded video, you can also review the POS transactions that occur in the video.

1. Add a camera that is linked to the POS transaction source to the View, and display the camera's recorded video

2. In the image panel, click **View POS Transactions**.

   If there are more than one POS transaction source linked to the camera, you will be prompted to select one. The POS transactions are displayed in the next image panel.

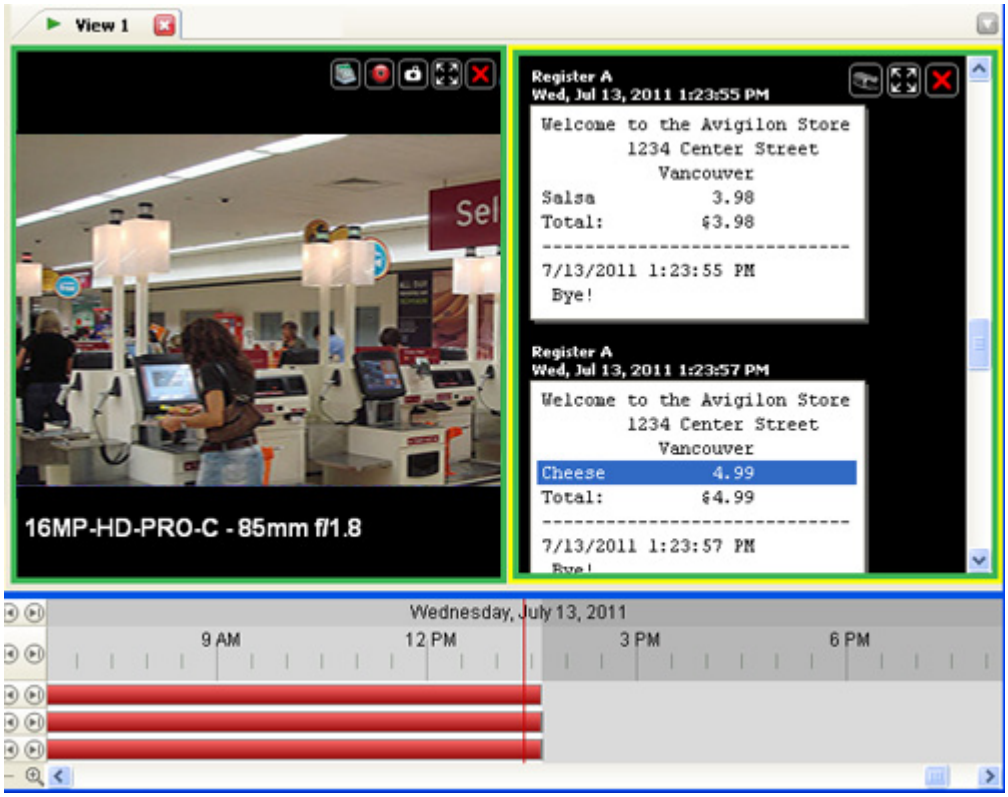


Figure A. Recorded POS transactions displayed in an image panel

- Each transaction is separated by date and time.
- When you select a transaction, the video moves to that event on the Timeline.
- Scroll up or down to see other transactions from the POS transaction source.

3. To display cameras that are linked to the POS transaction source, click **View Camera** in the POS transaction image panel.

   If multiple cameras are connected to the POS transaction source, you will be prompted to select one.

4. Use the Timeline to review the video in more detail.

For more information about Timelines, see Playing Back Recorded Video.

If you want to find a specific POS transaction, see Performing a POS Transaction Search.

Adjusting Video Display in Image Panels

You can adjust the image panel display settings to improve the video display on your monitor.

Maximizing an Image Panel

You can maximize an image panel to enlarge the video display.

Maximizing an Image Panel

Perform one of the following:

- Right-click an image panel and select **Maximize**.
- Inside the image panel, click **Maximize**.
- Double-click the image panel.

Restoring an Image Panel

Perform one of the following:

- Right-click the maximized image panel and select **Restore Down**.
- Inside the image panel, click **Restore Down**.
- Double-click the image panel.

Displaying Video Overlays

When you monitor video in a View, you can select the type of information that is displayed over the video in each image panel.

- Select **View > Image Overlays**, then select one or more of the following:

Option	Description
Camera Name	Displays the name given to the camera.
Camera Location	Displays the location given to the camera.
Timestamp	Displays the exposure timestamp for the video. Includes the server time zone.
Motion Activity	Highlights detected motion events in red.

Changing the Image Panel Display Quality Settings

If you do not have enough processing power, you may not be able to watch video at the full image rate and full quality. You can bias the image panels to display video in high quality and low frame rate, or lower quality and high frame rate.

1. Select **Tools > Change Display Quality...** to open the Change Display Quality dialog box.
2. In the Change Display Quality dialog box, select one of the following:

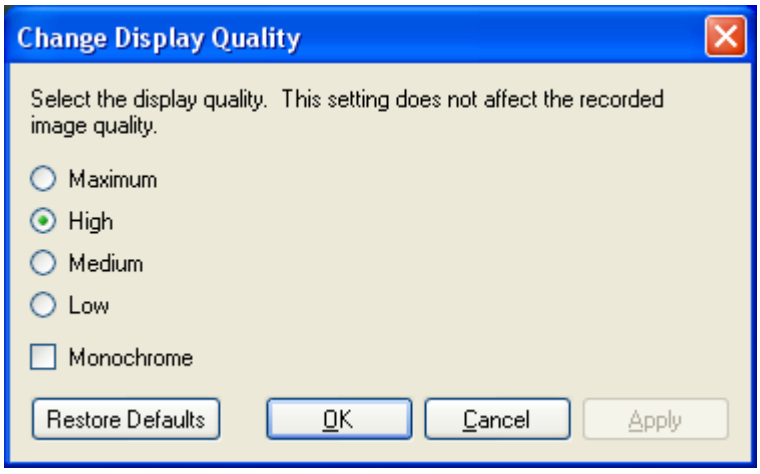


Figure A. Change Display Quality dialog box

   - **Maximum:** displays the full video resolution with the lowest image rate.

- **High:** displays 1/4 of the full video resolution.
- **Medium:** displays 1/16 of the full video resolution.
- **Low:** displays 1/64 of the full video resolution with the highest image rate.

3. Select the Monochrome check box to display the video in black and white.
4. Click **OK**.

Changing the Image Panel Display Adjustments Settings

You can change the image panel display settings to bring out video details that are hard to see with the image panel's default settings.

1. Right-click an image panel and select **Display Adjustments...**.

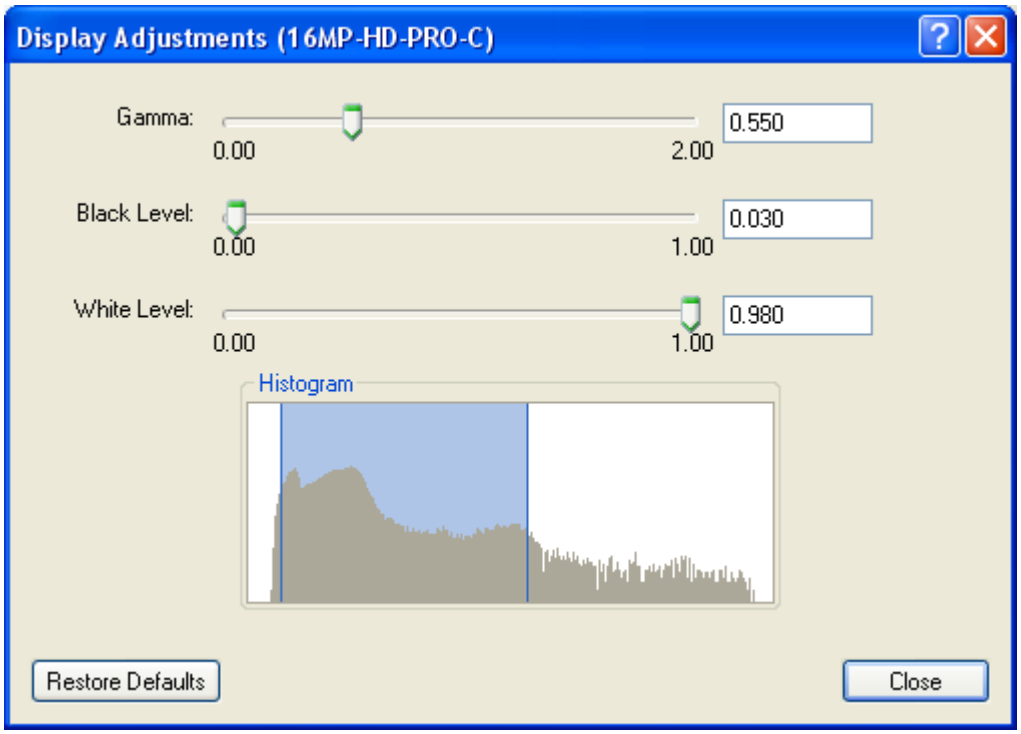


Figure A. Display Adjustments dialog box

2. Move the sliders to adjust the **Gamma**, **Black Level** and **White Level**.

   The image panel displays a preview of your changes.
3. Click **Restore Defaults** to clear your changes.
4. Click **Close** to save your changes.

Displaying Analog Video in Deinterlaced Mode

If there are visible interlacing artifacts in the analog camera video, you can enable the deinterlacing filter to help improve the video image.

- Select **View > Display Deinterlaced Images**.

Authenticating Video

All Avigilon Native Video Export (AVE) and Avigilon Backup (AVK) files contain an encrypted digital signature that is used to confirm that exported images have not been tampered with.

- To authenticate a video, select **Tools > Authenticate Images...**.

  The Authenticate Images dialog box appears and displays the progress as the application checks all the video images for tampering.

When the process is complete, the Authenticate Images dialog box displays the number of images that are authentic and the number of images that have been corrupted.

Figure A. Authenticate Images dialog box

Camera Properties

To see detailed information about any camera in the AVE file, you need to access the camera properties.

- In the System Explorer, right-click a camera and select properties.

Figure A. Camera Properties dialog box

The Camera Properties dialog box displays the following information about the camera:

- Camera name
- Model number
- Firmware version
- Location
- Serial number
- Resolution
- MAC Address

Search

You can search for recorded video by events, thumbnails, pixel area, POS transactions, alarms or license plates.

Note: If your video file does not contain any of the following information, that search option will not be displayed.

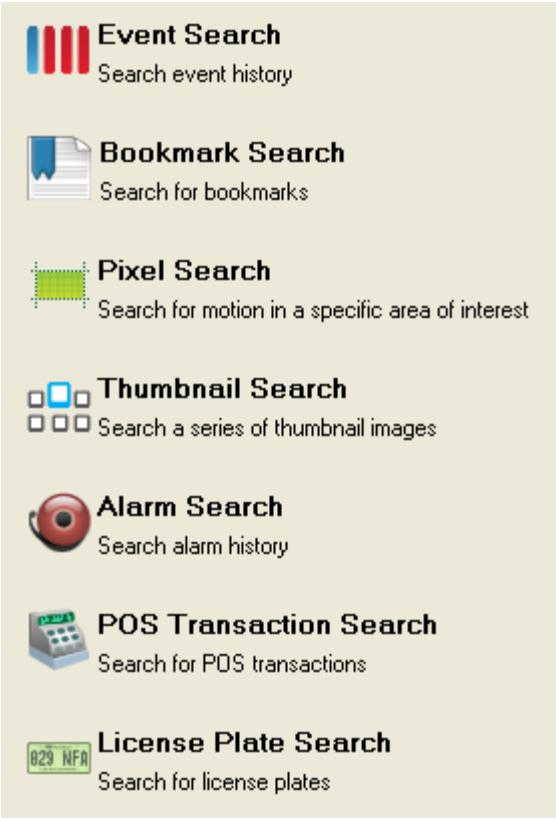


Figure A. Search options

Performing an Event Search

The Event Search allows you to search for a specific motion events, digital input events and bookmarked video.

1. Click **Search** to open the Search tab.
2. In the Search tab, select **Event Search**.

   The Search:Event tab is displayed.

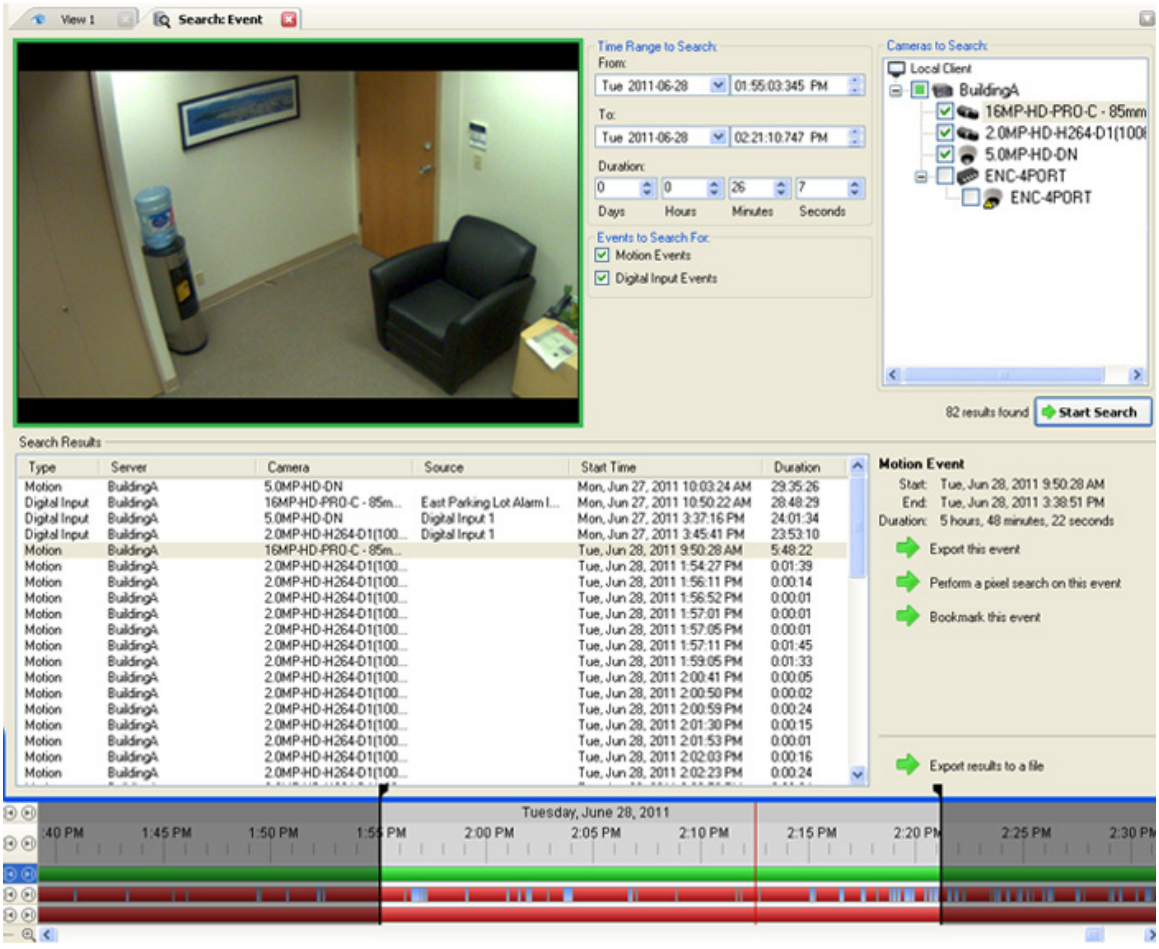


Figure A. Search: Event tab

3. In the Camera to Search area, select all the cameras you want to include in the search.
4. In the Time Range to Search area, set the date and time range of your search. The time range is highlighted on the Timeline by the black time range markers. You can also drag the time range markers to modify the time range.
5. In the Events to Search For area, select the types of events to include in the search.
6. In the Text to Match area, enter text to search for in the titles and descriptions of bookmarks.
7. Click **Start Search**.

Viewing Event Search Results

1. In the Search Results area, select a search result. The event is highlighted on the Timeline and the video is displayed in the search image panel. Details about the search result are displayed on the right.

   Tip: You can change the size of the image panel by moving the edge of the search results.

2. Use the Timeline controls to review the event.

   See Playing Back Recorded Video for more information.

3. If you want to further refine your search, click **Perform a pixel search on this event**. You can now search for any pixel movement in the selected result.

   See Performing a Pixel Search for more information.

4. Click **Export this event** to export the selected event video.

   See Exporting Recorded Video and Images for more information.

5. To export all listed results, click **Export results to a file** and save the file.

Performing a Bookmark Search

The Bookmark Search allows you to search for a specific bookmark.

1. Click **Search** to open the Search tab.

2. In the Search tab, select **Bookmark Search**.

   The Search:Bookmark tab is displayed. All available bookmarks are listed on the left.

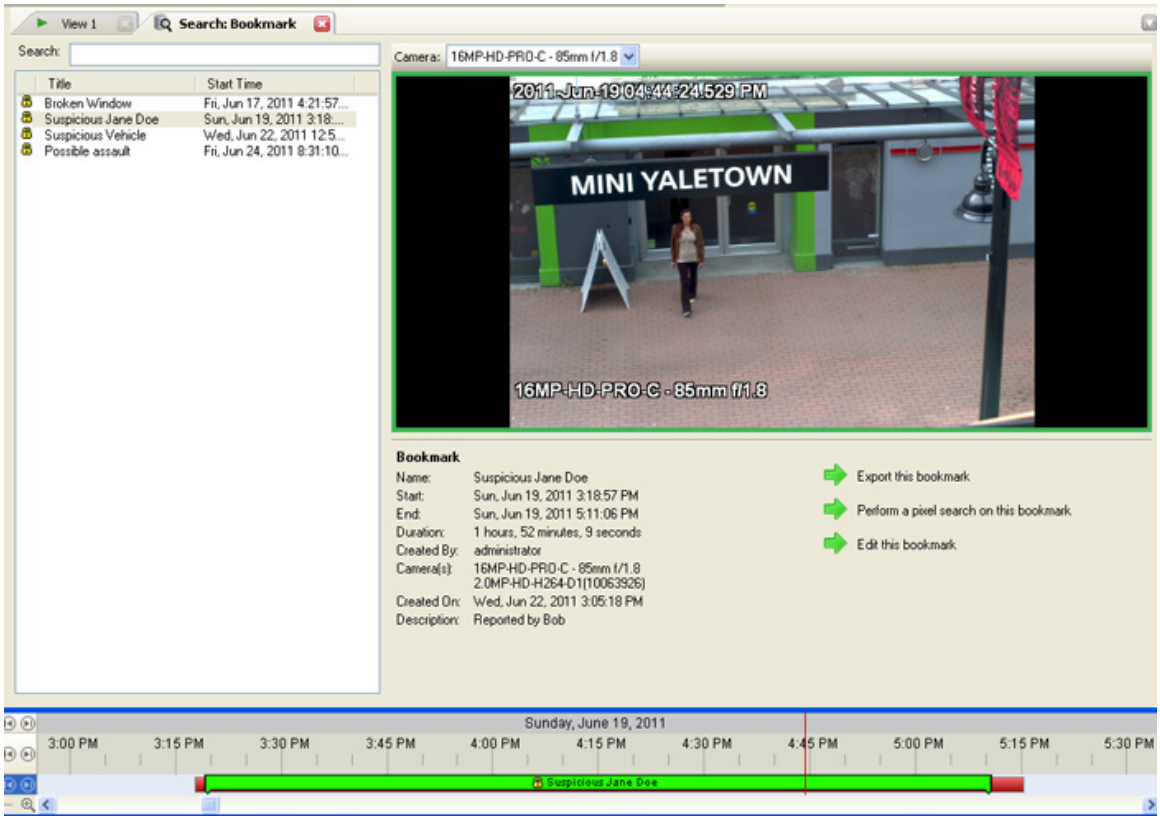


Figure A. Search:Bookmark tab

3. In the **Search** field, enter any text that may appear in the bookmark's title, description, linked camera name or the name of the user who created the bookmark.

   The search is automatically performed on all the listed bookmarks until only the matches are displayed.

Viewing Bookmark Search Results

1. In the Bookmark list, select a bookmark. The bookmark is highlighted on the Timeline and the video is displayed in the image panel. Details about the bookmark are displayed under the image panel.
2. Use the Timeline controls to review the event.

   See Playing Back Recorded Video for more information.
3. Click **Export this bookmark** to export the selected bookmark.

   See Exporting Recorded Video and Images for more information.
4. If you want to further refine your search, click **Perform a pixel search on this bookmark**. You can now search for any pixel movement in the selected bookmarked video.

See Performing a Pixel Search for more information.

Performing a Pixel Search

The Pixel Search allows you to search for tiny pixel change in the recorded video.

1. Click **Search** to open the Search tab.
2. In the Search tab, select **Pixel Search**.

   The Search:Pixel tab displays.

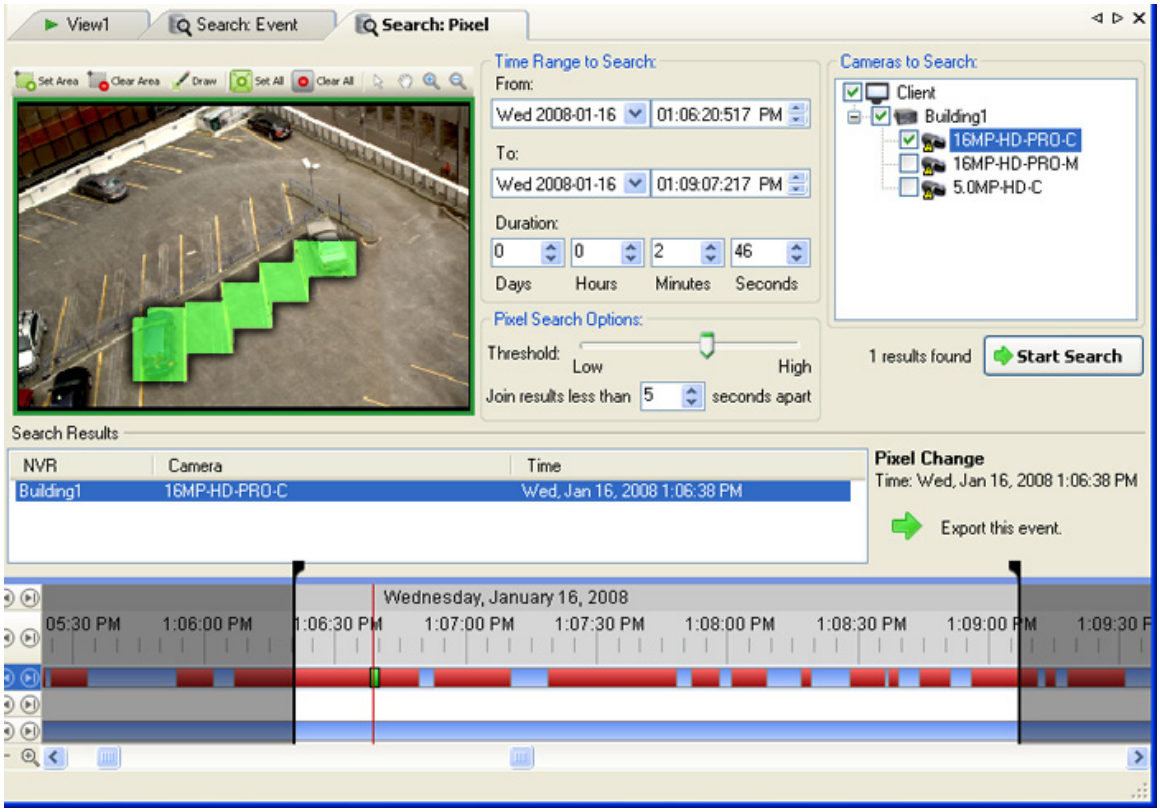


Figure A. Search:Pixel tab

   By default, the entire search image panel is highlighted in green.

3. In the Camera to Search area, select a camera.
4. In the Time Range to Search area, set the date and time range of your search. The time range is highlighted on the Timeline by the black time range markers. You can also drag the time range markers to modify the time range.
5. Define the pixel search area by using the motion detection tools above the image panel. Only areas highlighted in green are searched.

6. In the Pixel Search Options area, drag the **Threshold** slider to select the amount of motion required to return a search result.

   A high threshold requires more pixels to change before results are found.

7. Enter a number in the **Join results less than** field to set the minimum number of seconds between separate search results. You can enter any number between 1-100 seconds.

8. Click **Start Search**.

Viewing Pixel Search Results

1. In the Search Results area, select a search result. The event is highlighted on the Timeline and the video is displayed in the search image panel. Details about the search result are displayed on the right.

   Tip: You can change the size of the image panel by moving the edge of the search results.

2. Use the Timeline controls to review the event.

   See Playing Back Recorded Video for more information.

3. Click **Export this event** to export the selected event video.

   See Exporting Recorded Video and Images for more information.

4. To export all listed results, click **Export results to a file** and save the file.

Performing a Thumbnail Search

The Thumbnail Search is a visual search that displays the search results as a series of thumbnail images.

1. Click **Search** to open the Search tab.

2. In the Search tab, select **Thumbnail Search**.

   The Search:Thumbnails tab displays.

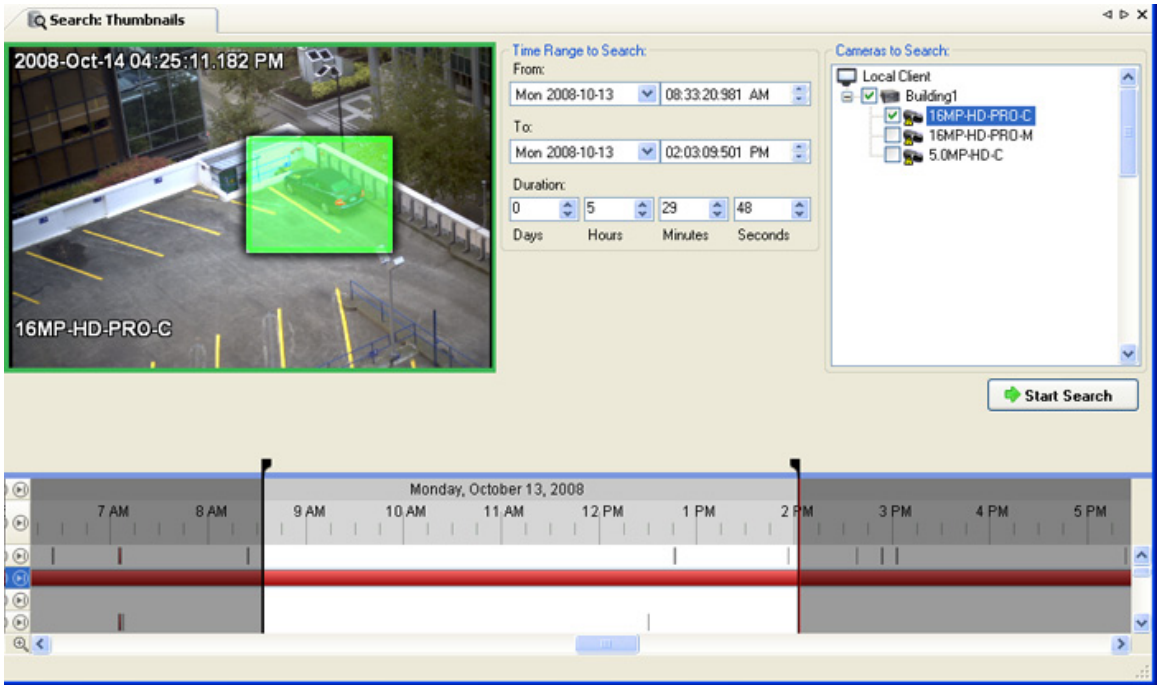


Figure A. Search:Thumbnails tab

3. In the Camera to Search area, select a camera.
4. In the Time Range to Search area, set the date and time range of your search. The time range is highlighted on the Timeline by the black time range markers. You can also drag the time range markers to modify the time range.
5. In the image panel, move or drag the edges of the green overlay to focus the search on one area in the video image.

   Only the area highlighted in green is searched.
6. Click **Start Search**.

Viewing Thumbnail Search Results

The search results display thumbnails at equal intervals on the Timeline.

1. To change the size of the search result thumbnails, select **Large Thumbnails**, **Medium Thumbnails**, or **Small Thumbnails** from the drop-down menu above the search results and click **Search Again**.

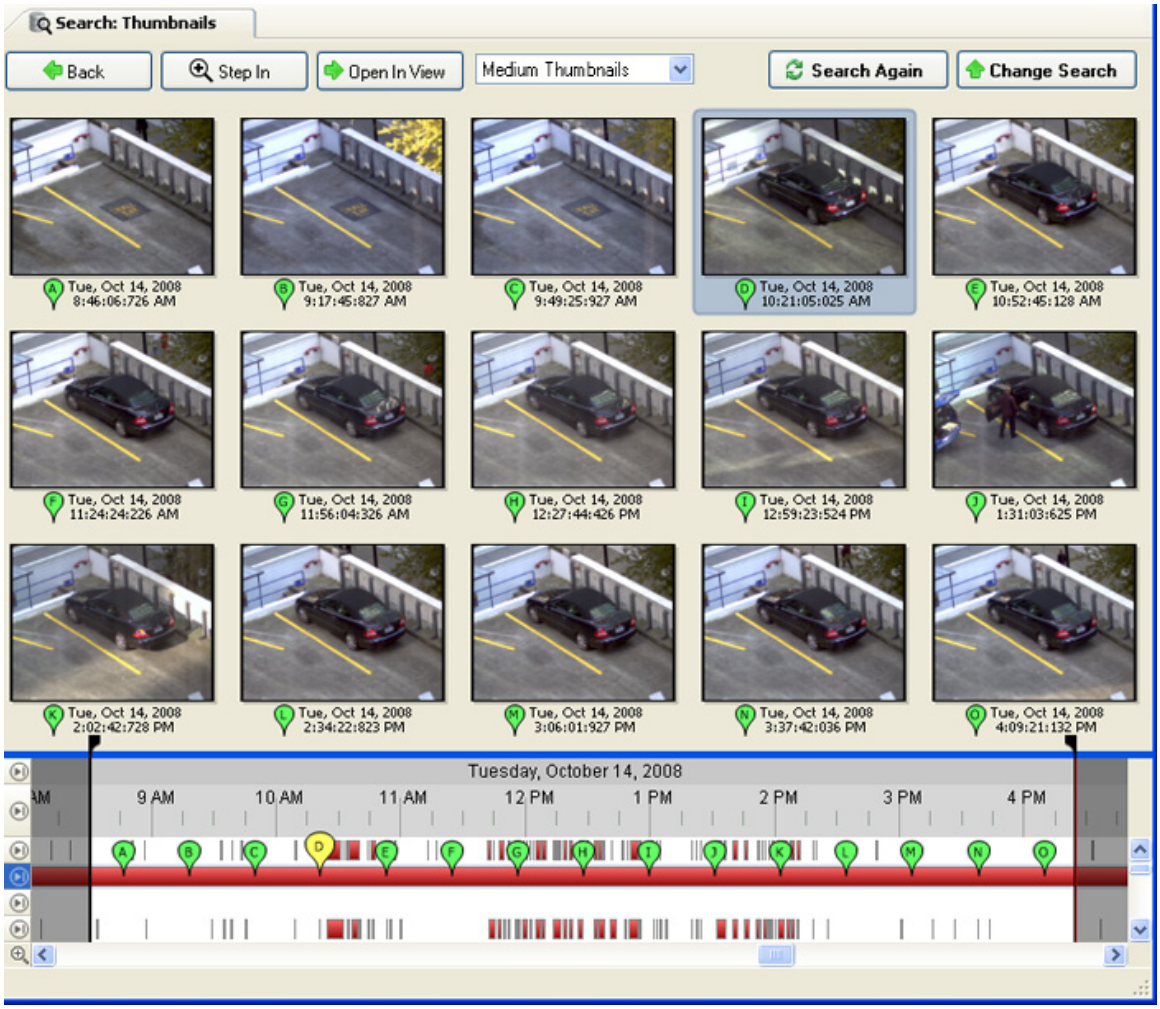


Figure B. Search:Thumbnail results tab

2. Select a thumbnail to highlight the video on the Timeline.
3. Click **Step In**, or double-click the thumbnail to perform another search around the thumbnail.

   Click **Back** to return to the previous results page.
4. Click **Open In View** to open the recorded video in a new View.
5. Click **Change Search** to change the search criteria.

Performing an Alarm Search

Alarm search allows you to search for alarm in the exported video.

1. Click **Search** to open the Search tab.

2. In the Search tab, select **Alarm Search**.

   The Search:Alarms tab is displayed.

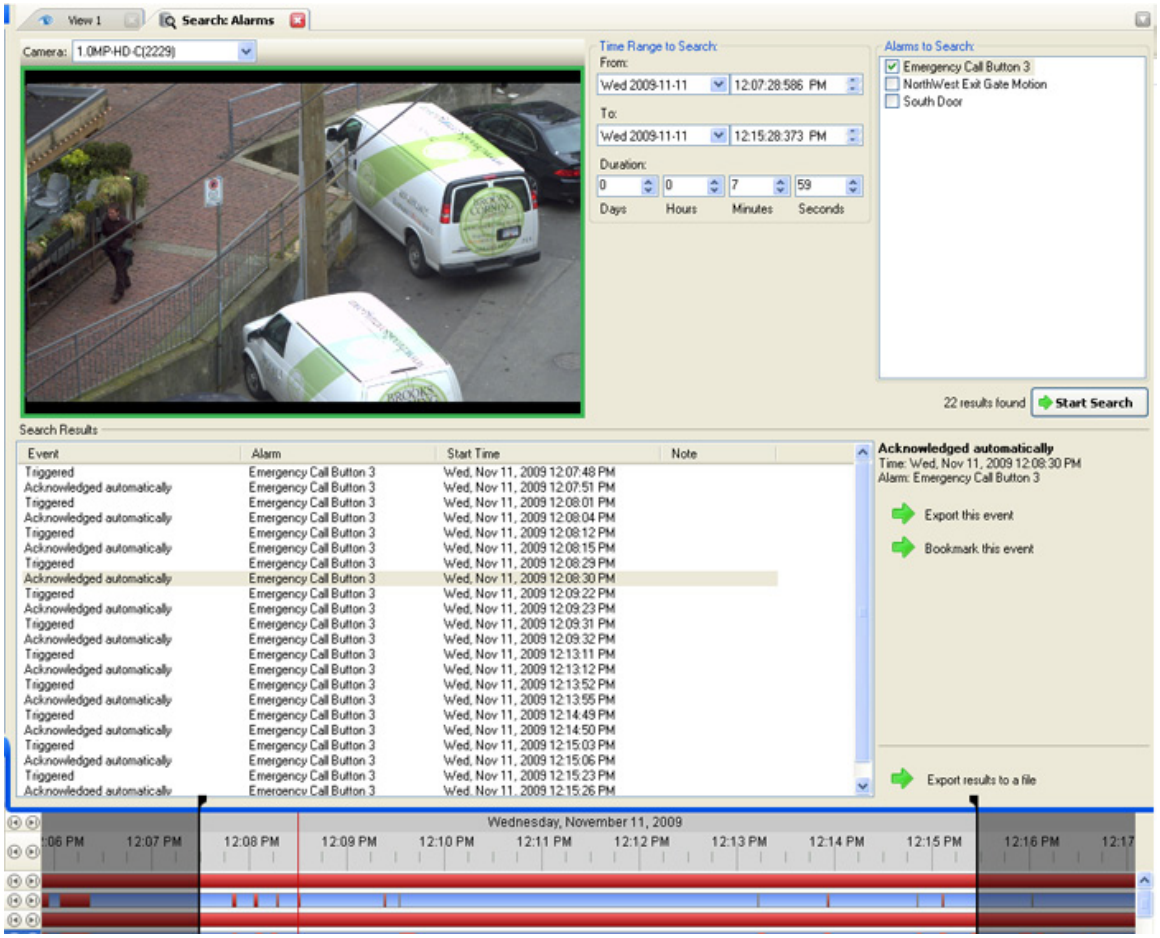


Figure A. Search:Alarms tab

3. In the Alarm to Search list, select all the alarms you would like to include in the alarm search.
4. In the Time Range to Search area, set the date and time range of your search. The time range is highlighted on the Timeline by the black time range markers. You can also drag the time range markers to modify the time range.
5. Click **Start Search**.

Viewing Alarm Search Results

1. In the Search Results area, select a search result. The event is highlighted on the Timeline and the video is displayed in the search image panel. Details about the search result are displayed on the right.

Tip: You can change the size of the image panel by moving the edge of the search results.

2. Use the Timeline controls to review the event.

   See Playing Back Recorded Video for more information.

3. If the event is linked to multiple cameras, select a camera from the **Camera** drop down list to change the video displayed in the image panel.

4. Click **Export this event** to export the selected event video.

   See Exporting Recorded Video and Images for more information.

5. To export all listed results, click **Export results to a file** and save the file.

Performing a POS Transaction Search

The POS Transaction Search allows you to search for specific transactions.

1. Click **Search** to open the Search tab.

2. In the Search tab, select **POS Transactions Search**.

   The Search: POS Transactions tab is displayed.

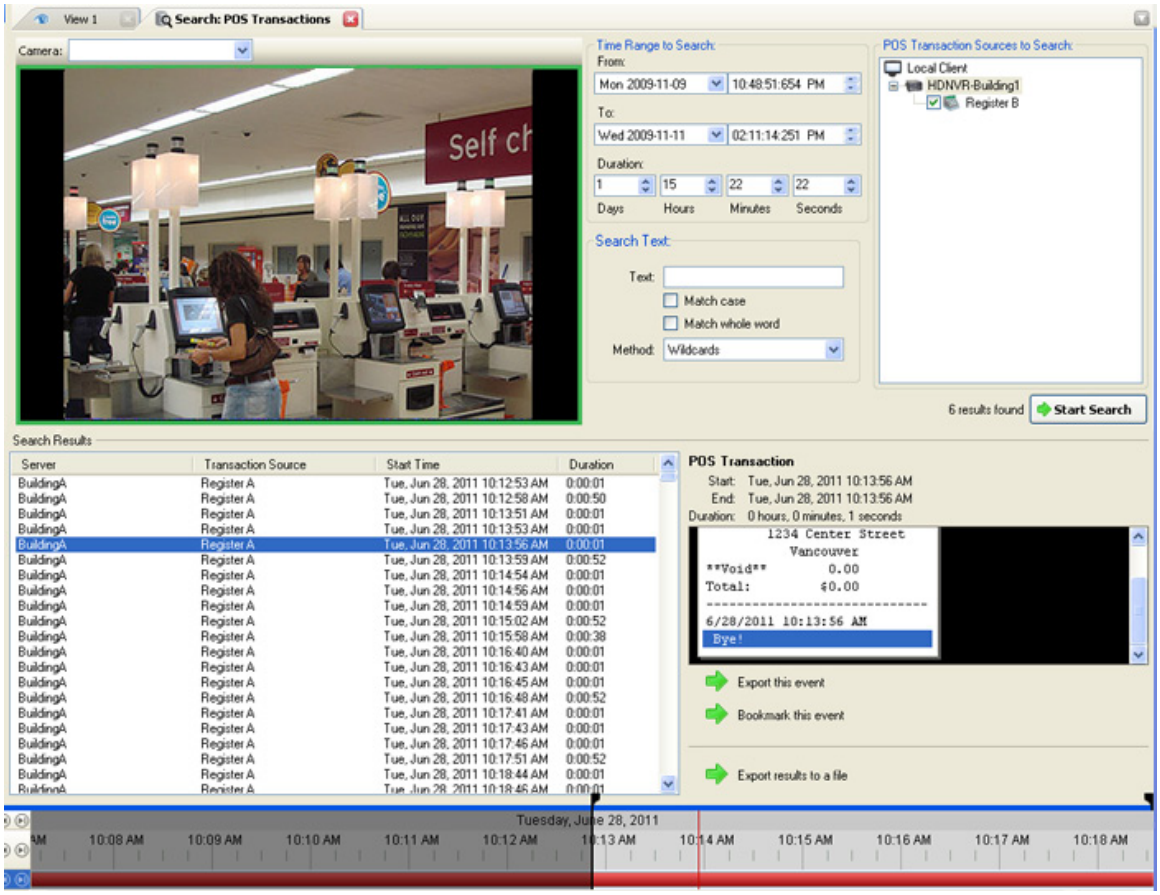


Figure A. Search:POS Transactions tab

3. In the POS Transaction Sources to Search area, select all the POS transaction sources you would like to include in the search.

4. In the Time Range to Search area, set the date and time range of your search. The time range is highlighted on the Timeline by the black time range markers. You can also drag the time range markers to modify the time range.

5. In the Search Text area, enter any text that will help you filter the search results. For example, you can enter product names or transaction values.

   Use the **Wildcards** and **Regular Expression** search methods to find a range of results. Leave the **Text** field blank to find all transactions.

6. Click **Start Search**.

Viewing POS Transaction Search Results

1. In the Search Results area, select a search result. The event is highlighted on the Timeline and the video is displayed in the search image panel. Details about the search result are displayed on the right.

Tip: You can change the size of the image panel by moving the edge of the search results.

2. Use the Timeline controls to review the event.

   See Playing Back Recorded Video for more information.

3. If the event is linked to multiple cameras, select a camera from the **Camera** drop down list to change the video displayed in the image panel.

4. Click **Export this event** to export the selected event video.

   See Exporting Recorded Video and Images for more information.

5. To export all listed results, click **Export results to a file** and save the file.

Performing a License Plate Search

The License Plate Search allows you to search for license plates that were detected in the exported video.

1. Click **Search** to open the Search tab.

2. In the Search tab, select **License Plate Search**.

   The Search: License Plates tab is displayed.

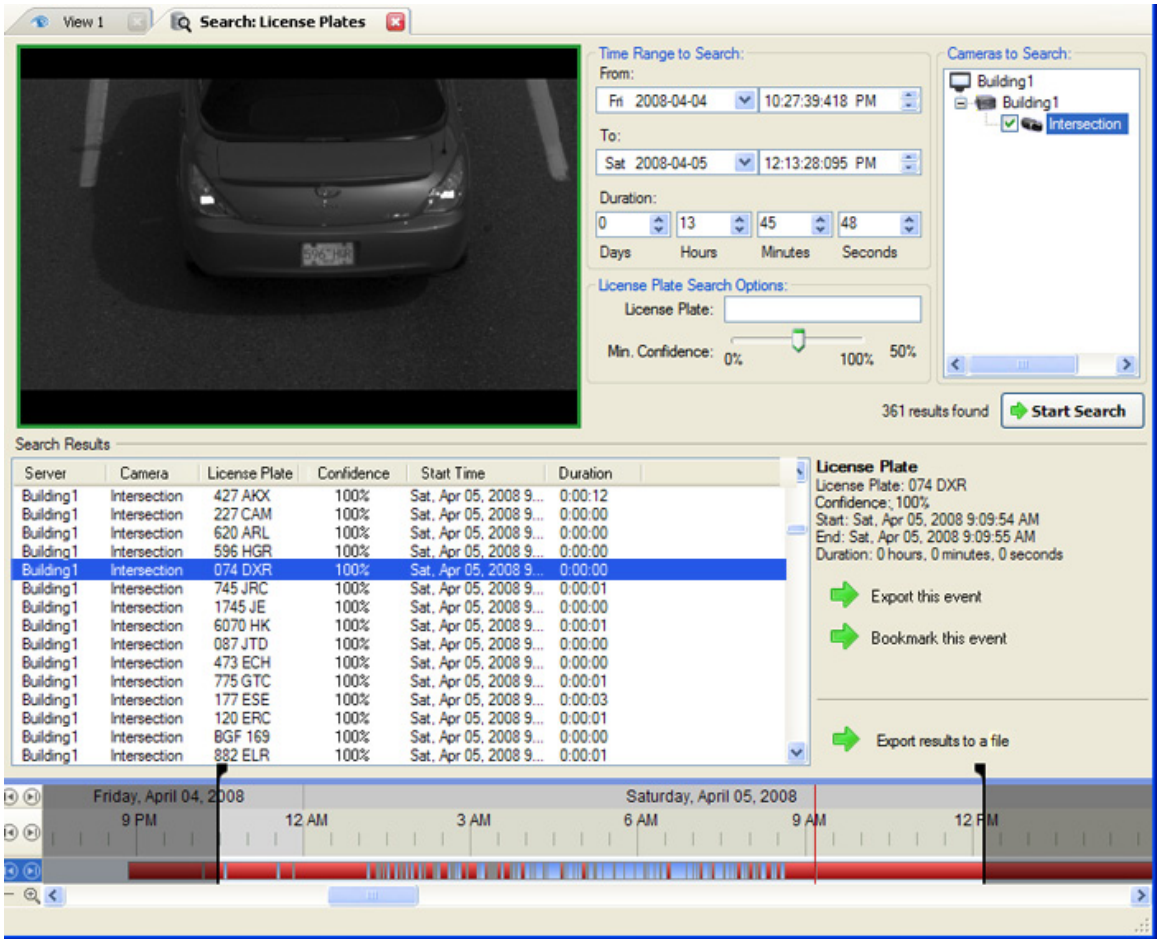

View 1
Search: License Plates
Time Range to Search:
From:
Fri 2008-04-04
10:27:39:418 PM
To:
Sat 2008-04-05
12:13:28:095 PM
Duration:
0
13
45
48
Days
Hours
Minutes
Seconds
License Plate Search Options:
License Plate:
Min. Confidence:
0%
100%
50%
Cameras to Search:
Building1
Building1
Intersection
361 results found
Start Search
Search Results
Server
Camera
License Plate
Confidence
Start Time
Duration
Building1 Intersection 427 AKX 100% Sat, Apr 05, 2008 9... 0:00:12
Building1 Intersection 227 CAM 100% Sat, Apr 05, 2008 9... 0:00:00
Building1 Intersection 620 ARL 100% Sat, Apr 05, 2008 9... 0:00:00
Building1 Intersection 596 HGR 100% Sat, Apr 05, 2008 9... 0:00:00
Building1 Intersection 074 DXR 100% Sat, Apr 05, 2008 9... 0:00:00
Building1 Intersection 745 JRC 100% Sat, Apr 05, 2008 9... 0:00:01
Building1 Intersection 1745 JE 100% Sat, Apr 05, 2008 9... 0:00:00
Building1 Intersection 6070 HK 100% Sat, Apr 05, 2008 9... 0:00:01
Building1 Intersection 087 JTD 100% Sat, Apr 05, 2008 9... 0:00:00
Building1 Intersection 473 ECH 100% Sat, Apr 05, 2008 9... 0:00:00
Building1 Intersection 775 GTC 100% Sat, Apr 05, 2008 9... 0:00:01
Building1 Intersection 177 ESE 100% Sat, Apr 05, 2008 9... 0:00:03
Building1 Intersection 120 ERC 100% Sat, Apr 05, 2008 9... 0:00:01
Building1 Intersection BGF 169 100% Sat, Apr 05, 2008 9... 0:00:00
Building1 Intersection 882 ELR 100% Sat, Apr 05, 2008 9... 0:00:01
License Plate
License Plate: 074 DXR
Confidence: 100%
Start: Sat, Apr 05, 2008 9:09:54 AM
End: Sat, Apr 05, 2008 9:09:55 AM
Duration: 0 hours, 0 minutes, 0 seconds
Export this event
Bookmark this event
Export results to a file
Friday, April 04, 2008
Saturday, April 05, 2008
9 PM
12 AM
3 AM
6 AM
9 AM
12 PM

Figure A. Search: License Plates tab

3. In the Camera to Search area, select all the cameras you want to include in the search.
4. In the Time Range to Search area, set the date and time range of your search. The time range is highlighted on the Timeline by the black time range markers. You can also drag the time range markers to modify the time range.
5. In the License Plate Search Options area, enter the license plate you want to find and a minimum confidence of a match.
6. Click **Start Search**.

Viewing License Plate Search Results

1. In the Search Results area, select a search result. The event is highlighted on the Timeline and the video is displayed in the search image panel. Details about the search result are displayed on the right.

   Tip: You can change the size of the image panel by moving the edge of the search results.

2. Use the Timeline controls to review the event.

   See Playing Back Recorded Video for more information.

3. If the event is linked to multiple cameras, select a camera from the **Camera** drop down list to change the video displayed in the image panel.

4. Click **Export this event** to export the selected event video.

   See Exporting Recorded Video and Images for more information.

5. To export all listed results, click **Export results to a file** and save the file.

Export

You can re-export the Avigilon Native Video Export (AVE) and Avigilon Backup (AVK) files into other video and image formats. You can export a single snapshot of the video or export large parts of the video.

Exporting a Snapshot of an Image

You can export a snapshot of any image panel with video. When you export a snapshot, you are exporting whatever the image panel is currently displaying.

1. To export a snapshot, perform one of the following:

    - In the image panel, click the **Save Snapshot** icon.
    - Right-click the image panel and select **Save Snapshot**.

    The snapshot Export tab is displayed, and the image you want to export is displayed.

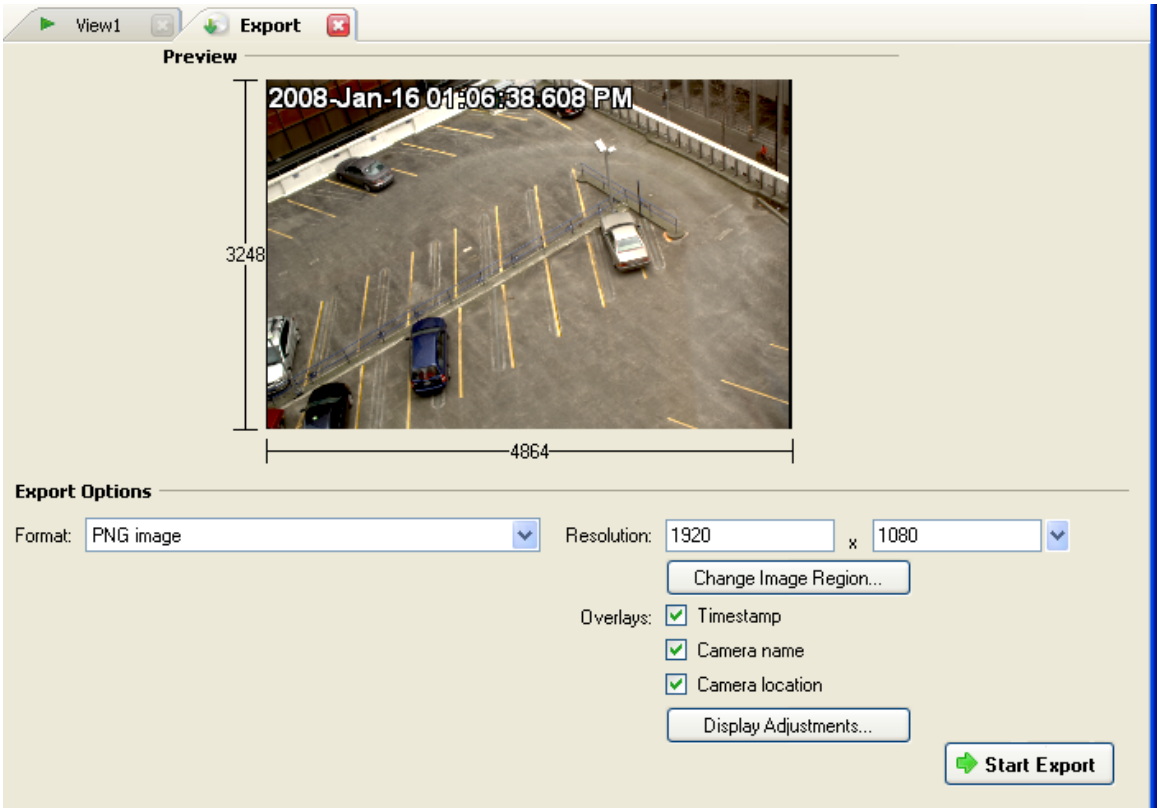


Figure A. Export tab for Snapshot export

2. In the **Format** drop down list, select an export format.
3. For the selected export format, define your preferences:

Format	Image options
Native	Native (AVE) video is exported at full compression and includes data that is linked to the video image.
PNG	1. In the **Resolution** field, select a resolution for the video image. You can manually enter the resolution or click the drop down arrow to select a standard resolution. **Note:** The **Resolution** field automatically maintains the image aspect ratio. 2. Click **Change Image Region...** to only export part of the video image. In the Change Image Region dialog box, move and resize the green overlay then click **OK**. Only areas highlighted in green are exported. 3. Select the image overlays you want: **Timestamp**, **Camera name**, and **Camera location**. 4. Click **Display Adjustments** to adjust the Gamma, Black Level and/or

	White Level.
JPEG	1. In the **Compression** field, select a compression level. 2. Set the image **Resolution**. 3. Click **Change Image Region** to only export a part of the video image. 4. Select the image overlays you want. 5. Click **Display Adjustments** to modify the image quality.
TIFF	1. Set the image **Resolution**. 2. Click **Change Image Region** to only export a part of the video image. 3. Select the image overlays you want. 4. Click **Display Adjustments** to modify the image quality.
Print	1. Click **Change Image Region** to only export a part of the video image. 2. Click **Printer Settings...** to change the selected printer and paper size. 3. Select the image overlays you want. 4. Click **Add Export Notes...** to add notes about the exported image. The notes are printed below the image. 5. Click **Display Adjustments** to modify the image quality.
PDF	1. Click **Change Image Region** to only export a part of the video image. 2. Select the image overlays you want. 3. Click **Add Export Notes...** to add notes about the exported image. 4. Click **Display Adjustments** to modify the image quality.

4. Click **Start Export**.

5. In the Save As dialog box, name the export file and click **Save**.

   The Preview area displays the snapshot you are exporting.

6. When the export is complete, click **OK**.

Exporting Recorded Video and Images

You can export the video file into smaller files or into a different format for viewing in other applications.

Accessing the Export Tab

The Export tab can be accessed in any of the following ways:

- On the toolbar, click **Export**.
- Select **File > Export**.
- While performing a search, select a search result and click **Export this event**.

Exporting Native Video

You can export the video as Avigilon Native Video Export (AVE) files again. AVE format allows you to export more than one video at a time.

1. Click **Export** to open the Export tab.

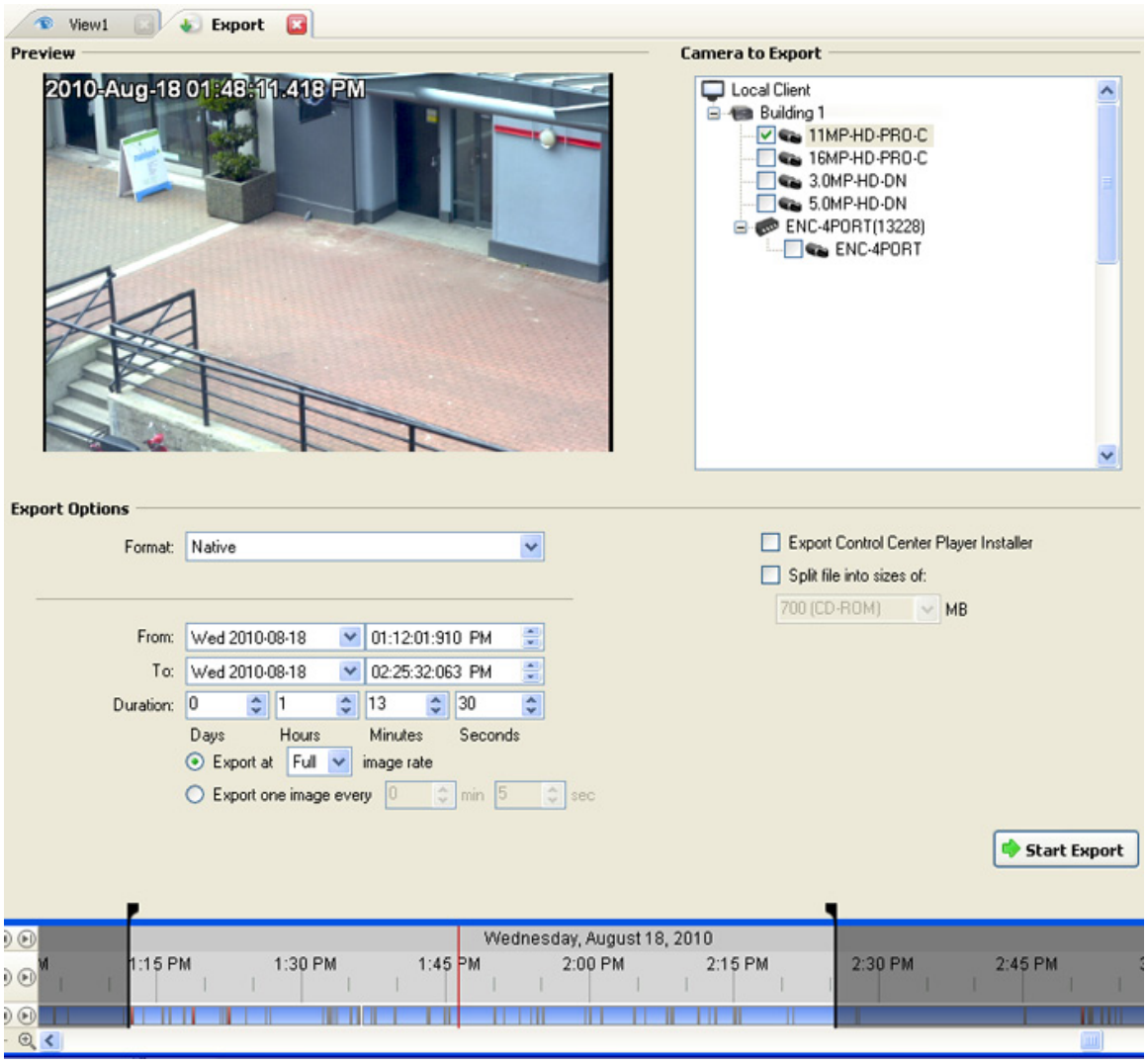


Figure A. Export tab for recorded video export

2. In the **Format** drop down list, select **Native**.
3. In the Camera to Export list, select the camera video you want to export.
4. Enter the time range you want to export. The time range is highlighted on the Timeline by black time range markers. You can also drag the time range markers to modify the time range.
5. Set the export image rate:

Option	Description
Export at __ image rate	Select this option to control how many images per second are exported. For example, the video is streaming at 30 images per second. If you select **1/2**, only 15 images for that second will be exported.

Export one image every __ min __sec	Select this option to control the time between each exported video image. For example, if you enter *5* min. *0* sec., only one image will be exported every 5 minutes.

6. To automatically divide the export into separate files that can be stored on optical media (like a CD or DVD), select the **Split file into sizes of:** check box. Then, manually enter a maximum file size in MB or select a pre-configured option from the drop down list.
7. Click **Start Export**.
8. In the Save As dialog box, name the export file and click **Save**.

   The Preview area displays the video you are exporting.
9. When the export is complete, click **OK**.

Exporting AVI Video

Video exported in Audio Video Interleave (AVI) format can be played in most media players.

1. Click **Export** to open the Export tab.

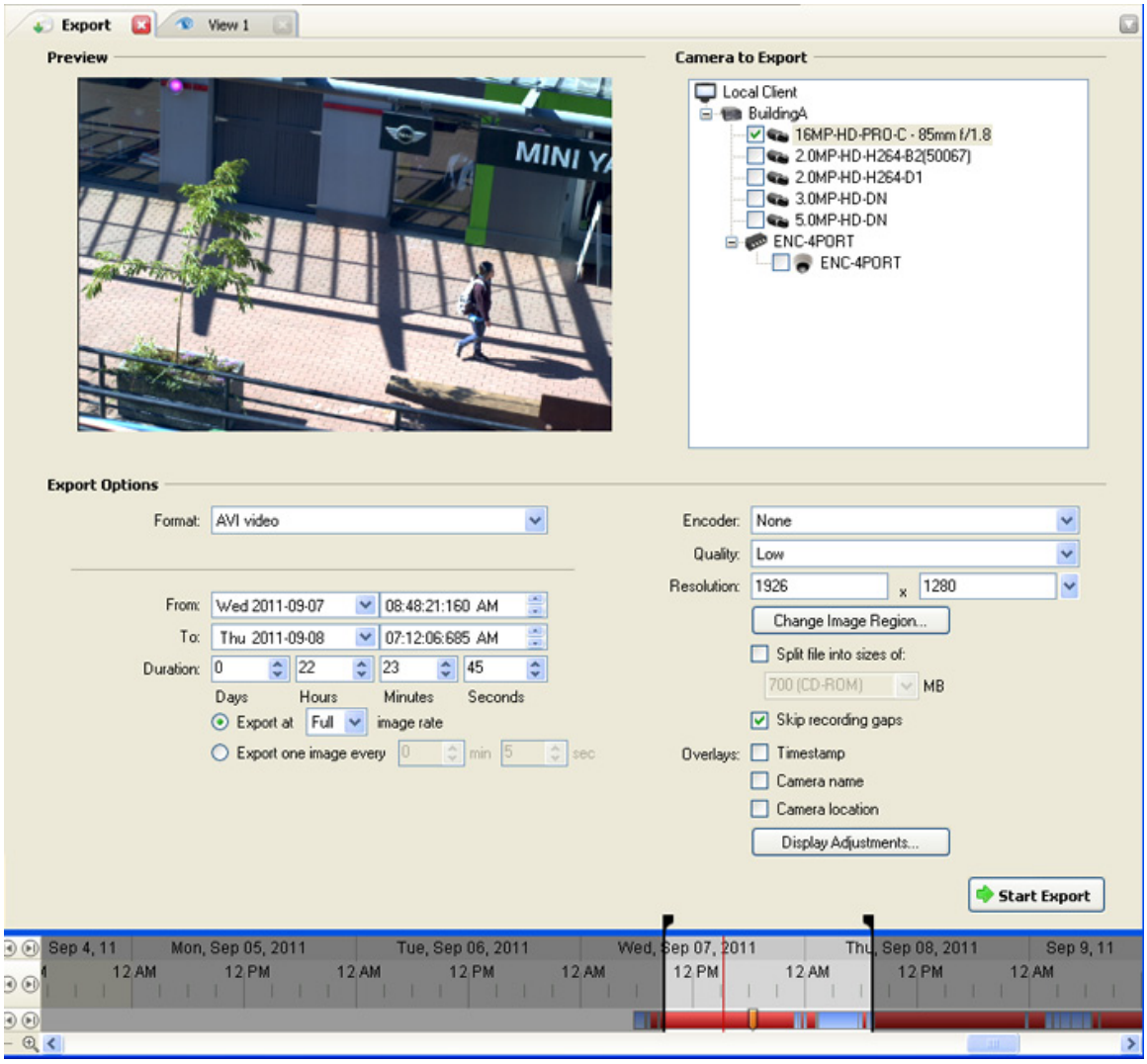


Figure A. Export tab for recorded video export

2. In the **Format** drop down list, select **AVI video**.
3. In the Camera to Export list, select the camera video you want to export.
4. Enter the time range you want to export. The time range is highlighted on the Timeline by black time range markers. You can also drag the time range markers to modify the time range.
5. Set the export image rate:

Option	Description
Export at __ image rate	Select this option to control how many images per second are exported. For example, the video is streaming at 30 images per second. If you select **1/2**, only 15 images for that second will be exported.

Export one image every __ min __sec	Select this option to control the time between each exported video image. For example, if you enter *5* min. *0* sec., only one image will be exported every 5 minutes.

6. In the **Encoder** field, select the compression used. The **VC-1 (Windows Media Video)** compression is included by default because it is tailored for high-resolution AVI encoding.
7. In the **Quality** drop down list, select the exported image quality level.
8. In the **Resolution** field, select a resolution for the video image. You can manually enter the resolution or click the drop down arrow to select a standard resolution.

   Note: The **Resolution** field automatically maintains the image aspect ratio.

   For high resolution video (11MP or 16MP) the greatest resolution option will be less than the camera's actual resolution because most media players cannot play high resolution AVI files.
9. To automatically divide the export into separate files that can be stored on optical media (like a CD or DVD), select the **Split file into sizes of:** check box. Then, manually enter a maximum file size in MB or select a pre-configured option from the drop down list.
10. Click **Change Image Region...** to only export part of the video image.

    In the Change Image Region dialog box, move and resize the green overlay then click **OK**. Only areas highlighted in green are exported.
11. Select the **Skips recording gaps** check box to avoid pauses in the video caused by gaps in the recording.
12. Select the image overlays you want: **Timestamp**, **Camera name**, and **Camera location**.
13. Click **Display Adjustments** to adjust the gamma, black level and/or white level.
14. Click **Start Export**.
15. In the Save As dialog box, name the export file and click **Save**.

    The Preview area displays the video you are exporting.
16. When the export is complete, click **OK**.

Exporting PNG, JPEG or TIFF Images

Video can be exported as a set of still images in PNG, JPEG, or TIFF format.

1. Click **Export** to open the Export tab.

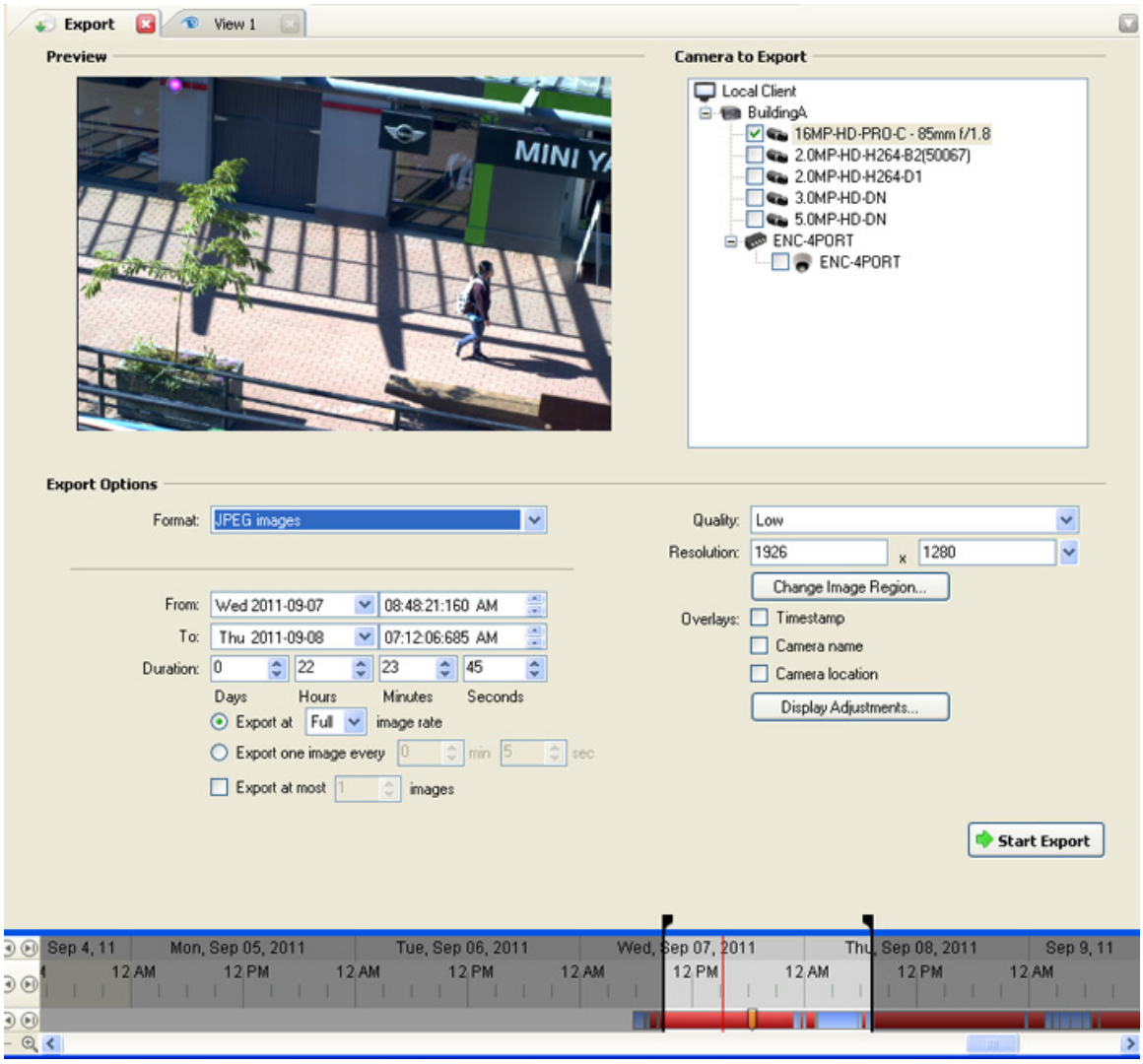


Figure A. Export tab for still image export

2. In the **Format** drop down list, select **PNG Images**, **JPEG Images**, or **TIFF Images**.
3. In the Camera to Export list, select the camera video you want to export.
4. Enter the time range you want to export. The time range is highlighted on the Timeline by black time range markers. You can also drag the time range markers to modify the time range.
5. Set the export image rate:

Option	Description
Export at __ image rate	Select this option to control how many images per second are exported. For example, the video is streaming at 30 images per second. If you select **1/2**, only 15 images for that second will be exported.

Export one image every __ min __sec	Select this option to control the time between each exported video image. For example, if you enter *5* min. *0* sec., only one image will be exported every 5 minutes.

6. Select the **Export at most __ images** check box and enter a number to limit the amount of images that are exported.
7. (JPEG only)

   In the **Quality** drop down list, select the exported image quality level.
8. In the **Resolution** field, select a resolution for the video image. You can manually enter the resolution or click the drop down arrow to select a standard resolution.

   Note: The **Resolution** field automatically maintains the image aspect ratio.
9. Click **Change Image Region...** to only export part of the video image.

   In the Change Image Region dialog box, move and resize the green overlay then click **OK**. Only areas highlighted in green are exported.
10. Select the image overlays you want: **Timestamp**, **Camera name**, and **Camera location**.
11. Click **Display Adjustments** to adjust the gamma, black level and/or white level.
12. Click **Start Export**.
13. In the Save As dialog box, name the export file and click **Save**.

    The Preview area displays the video you are exporting.
14. When the export is complete, click **OK**.

Exporting PDF and Print Images

Video can be exported as still images for printing or in PDF format.

1. Click **Export** to open the Export tab.

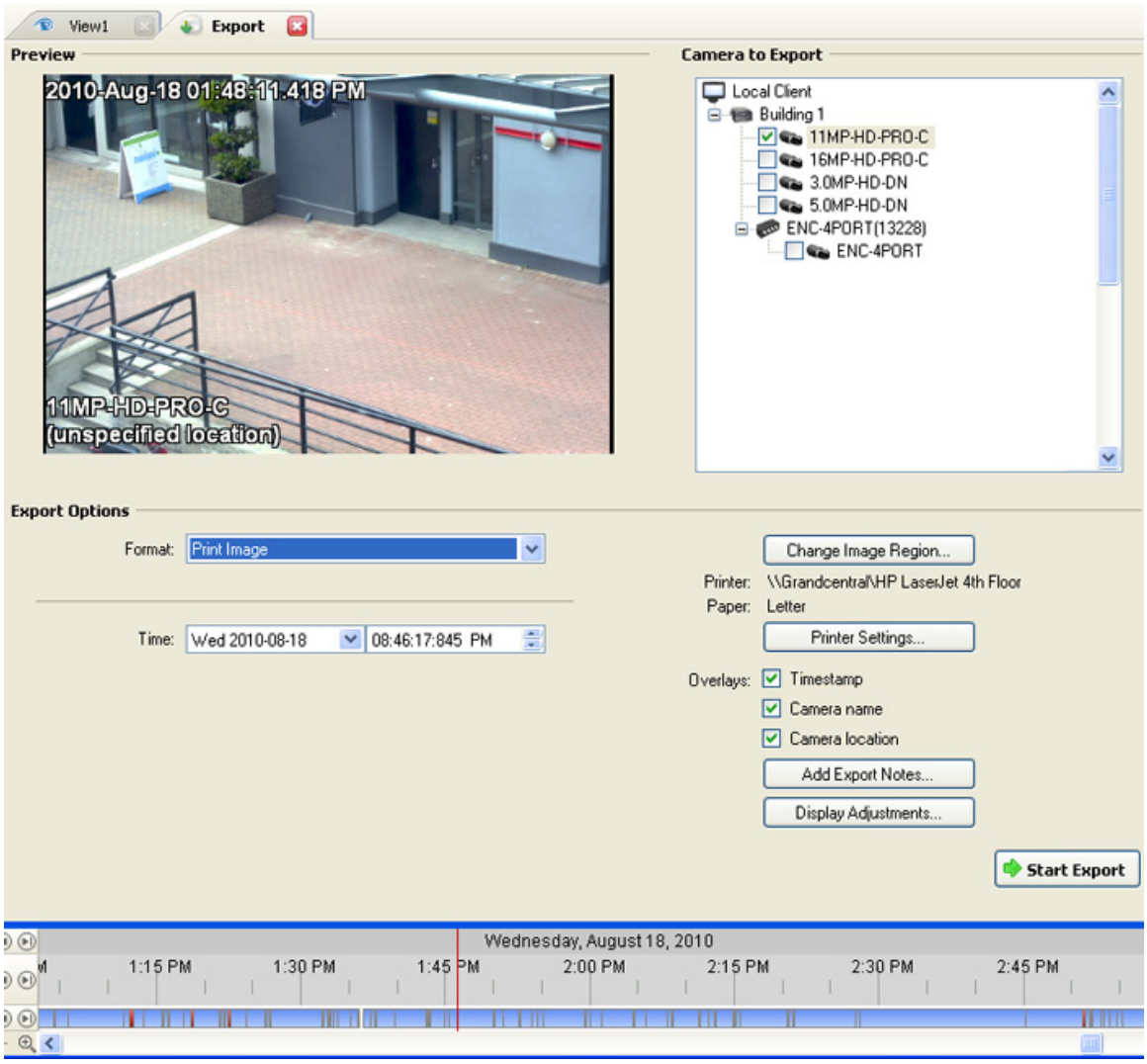


Figure A. Export tab for still image export

2. In the **Format** drop down list, select **Print Image** or **PDF File**.
3. In the Camera to Export list, select the camera video you want to export.
4. In the **Time** field, enter the exact date and time of the video image you want to export.
5. Click **Change Image Region...** to only export part of the video image.

   In the Change Image Region dialog box, move and resize the green overlay then click **OK**. Only areas highlighted in green are exported.
6. (Print Image only) Click **Print Settings** to change the printer and paper size that the image is printed on.
7. Select the image overlays you want: **Timestamp**, **Camera name**, and **Camera location**.
8. Click **Add Export Notes** to add notes about the exported image. The notes are added below the image.

9. Click **Display Adjustments** to adjust the gamma, black level and/or white level.
10. Click **Start Export**.
11. In the Save As dialog box, name the export file and click **Save**.

    The Preview area displays the video you are exporting.
12. When the export is complete, click **OK**.

Exporting WAV Audio

If a video contains audio, the audio is exported with the video. If required, you can choose to only export the audio file.

1. Click **Export** to open the Export tab.

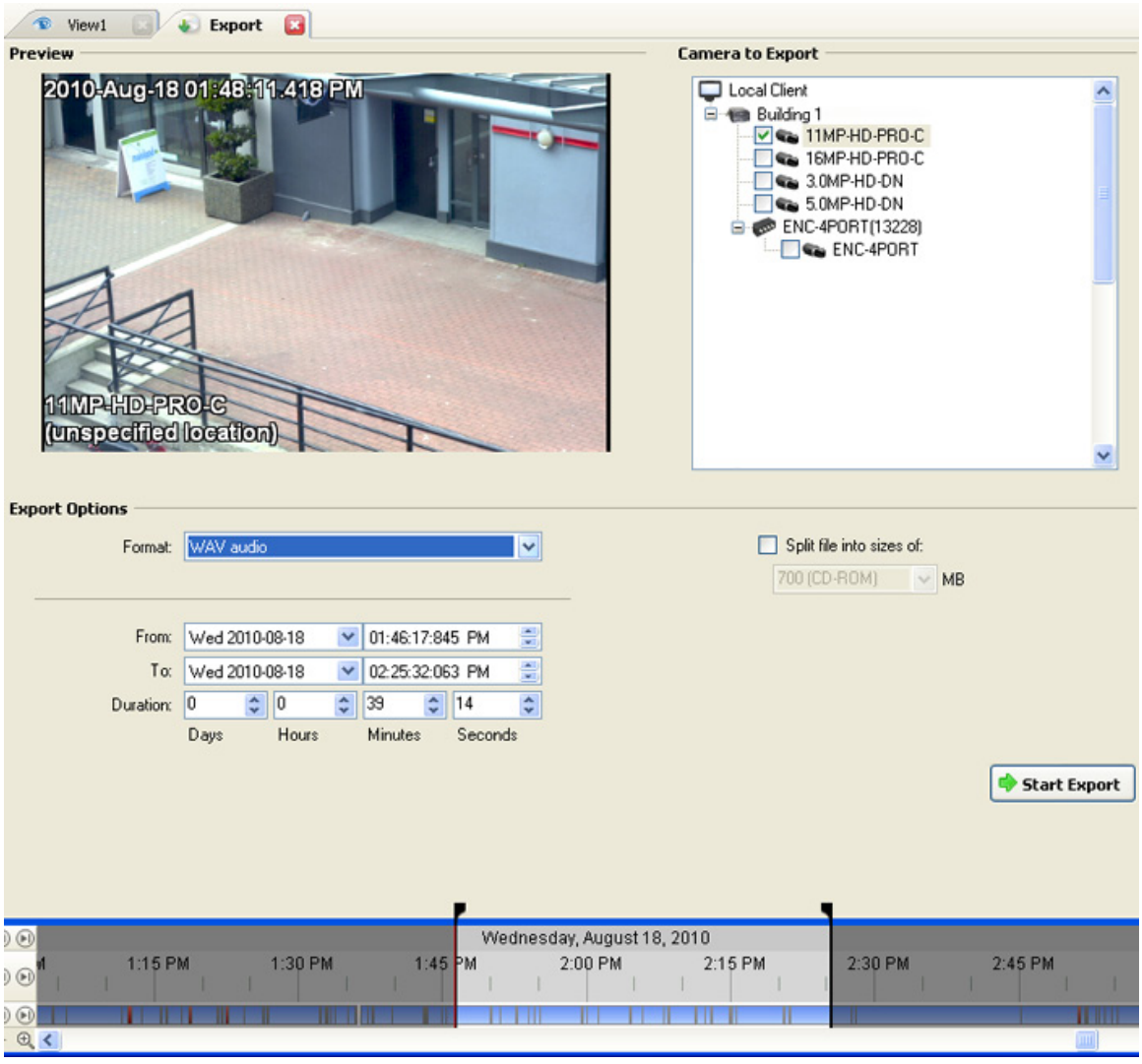


Figure A. Export tab for audio export

2. In the **Format** drop down list, select **WAV**.
3. In the Camera to Export list, select the camera video you want to export.
4. Enter the time range you want to export. The time range is highlighted on the Timeline by black time range markers. You can also drag the time range markers to modify the time range.
5. Click **Start Export**.
6. In the Save As dialog box, name the export file and click **Save**.

   The Preview area displays the video linked with the audio you are exporting.
7. When the export is complete, click **OK**.